CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-079

SITE CLEANUP REQUIREMENTS FOR

INNERCONN TECHNOLOGIES
AND
UNION BANK (FORMERLY KNOWN AS
CALIFORNIA FIRST BANK)

327 MOFFETT BOULEVARD
MOUNTAIN VIEW, SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board), finds that:

1. Groundwater and soil pollution have been found on the property at 327 Moffett Boulevard in the City of Mountain View in Santa Clara County. Union Bank (formerly known as California First Bank) , current owner of the property, and Innerconn Technologies, former occupant, are hereinafter referred to as the dischargers.

2. The property consisted of a parcel of real estate, approximately 1.64 acres in area, and a factory building and appurtenances thereon, in an area of light industrial and commercial development in proximity to an apartment complex. The building, empty and idle since 1984, was demolished and removed, as directed by the current owner, the week of March 27, 1989.

3. The 16,500 square-foot factory building was erected in 1957. It was used for the manufacture of semiconductor crystals by the Raytheon Company from 1967 to 1971 (or 1974) and for the manufacture of printed circuit boards by Innerconn Technologies (C & Z Circuits) from 1971 (or 1974) to 1984. Union Bank (formerly known as California First Bank) became owner of the property on February 19, 1985 through a trust deed sale.

4. Ownership of the property prior to a property transfer in 1971 is not known, nor is it known what the property was used for prior to 1967. The owner of record prior to Union Bank (formerly known as California First Bank) also owned Innerconn Technologies. Innerconn Technologies reportedly no longer is an operating entity.

5. C & Z Circuits (later known as Innerconn Technologies) used organic and inorganic acids, metal-plating solutions and organic solvents. Process wastewater generated in the building contained copper, nickel, lead and other priority pollutant metals. Innerconn Technologies stored drums of hazardous materials (corrosives, oxidizers and flammables) on-site.

6. For the period December 1980 through March 1984, results of Innerconn Technologies' waste monitoring program indicated levels of copper, nickel and lead discharged in the wastewater from the factory building to be in the range of 0.5 mg/l (500 ug/l) to 20 mg/l (20,000 ug/l).

7. Innerconn Technologies indicated in an Industrial Waste Discharge Permit filed March 18, 1974 that trace quantities of organic solvents, organic and inorganic acids, and metal plating solutions would be present in the factory building's industrial wastewater effluent.

8. City of Mountain View Fire Department files indicate that numerous fire and health and safety code violations occurred while Innerconn Technologies occupied the property and building at 327 Moffett Boulevard.

9. The Raytheon Company reportedly used volatile organic chemicals (VOCs) including acetone (Ac), methylethylketone (MEK) and trichloroethylene (TCE) on the premises.

10. In addition to the parties named in this Order, other parties may have contributed to pollution on the property. If additional information comes to light showing that Raytheon Company or any other party not currently named as a discharger caused or permitted any waste to be discharged or deposited on the 327 Moffett Boulevard site where it entered or could have entered into the waters of the State, the Board will consider adding that party's name to this Order.

11. The Mountain View Fire Department in 1985 requested that certain materials be removed from the property. Union Bank (formerly known as California First Bank) initiated investigations to determine if remedial measures were required. The results of preliminary site investigations show elevated levels of metals in soil to about 6 feet beneath the existing building, and VOCs in soil to depths of 15 feet and in the groundwater about 20 to 25 feet below the surface.

12. The primary inorganic pollutant is copper, in concentrations up to 7,500 mg/kg in the soil. The principal VOC pollutants in groundwater are 1,1-dichloroethane (DCA) to 4,000 ug/l, 1,1-dichloroethylene (DCE) to 2,100 ug/l, trichloroethylene (TCE) to 160 ug/l, and acetone (Ac) to 2,500 ug/l. Other

identified VOCs are 1,1,1-trichloroethane (TCA), perchloroethylene (PCE), cis-1,2-dichloroethylene (cis DCE), benzene, ethylbenzene, m,p-xylenes, o-xylene, chloroform, methylene chloride, and tetrahydrofuran.

13. The property is underlain by a thick sequence of unconsolidated and semiconsolidated alluvial material which includes geologic units corresponding to some of the Santa Clara Valley's important water-yielding deposits. Some municipal water is obtained by the City of Mountain View from aquifers 200 - 700 feet below the surface in this general area. One active municipal well is 3,000 feet east of the site, and there are approximately 50 water wells (not all active) within a three-mile radius of the site. The California Water Service Company supplies water to residents of Mountain View, from 15 active wells from one to several miles southwest of the site. One City of Mountain View municipal well, not presently in use, is in close proximity to the southwest corner of the property at 327 Moffett Boulevard.

14. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on December 17, 1986. The Basin Plan contains water quality objectives and beneficial uses for South San Francisco Bay and contiguous surface waters, and groundwater.

15. The existing and potential beneficial uses of the groundwater underlying and adjacent to the property include:

    a. Industrial process water supply
    b. Industrial service supply
    c. Municipal and domestic supply
    d. Agricultural supply

16. Groundwater pollution has occurred, with significant levels of VOCs detected. The presence of elevated levels of metals and VOCs in the soil are viewed as threats to waters of the State and as being able to create a condition of greater pollution or nuisance.

17. Interim remedial (removal) measures consistent with 40 C.F.R. Section 300.65 to control and contain any pollutant movement need to be implemented to alleviate the threat to public health and the environment posed by the continued presence and migration of pollutants and to provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives.

18. This action is an Order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the CEQA pursuant to Section 15321 of the Resources Agency Guidelines.

19. The Board has notified the dischargers and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

20. The Board, in a public meeting, heard and considered all comments pertaining to these requirements.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the dischargers shall clean up and abate the effects described in the above findings as follows:

A. PROHIBITIONS

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of waters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS

1. The storage, handling, treatment or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The dischargers shall conduct monitoring activities as needed to define the current local hydrogeologic conditions, and the lateral and vertical extent of soil and groundwater pollution. Should monitoring results show evidence of plume migration, additional plume characterization may be required.

C. PROVISIONS

1. The dischargers shall submit to the Board technical reports on self-monitoring work performed according to a program prescribed or amended by the Board's Executive Officer.

2. The dischargers shall comply with Prohibitions A.1., A.2., and A.3., and Specifications B.1. and B.2. above, in accordance with the following time schedule and tasks:

COMPLETION DATE/TASK:

a. 1. COMPLETION DATE: June 30, 1989

TASK: SITE CHARACTERIZATION. Submit a technical report acceptable to the Executive Officer which contains (1) identification and quantification of all organic and inorganic pollutants known or suspected because of previous activities and analytical testing, (2) an evaluation of soil pollution and groundwater pollution found to be present, (3) a summary of any work which resulted in the removal of pollutants from the soil and groundwater including quantities removed and where disposed, and (4) an estimate of remaining pollution.

In addition, this report shall contain (5) a **proposal** for the completion of site characterization work. The **proposal** should consider, at a minimum, the below listed elements:

(a) Definition of lateral and vertical extent of remaining soil and groundwater pollution.

(b) Evaluation of the threat or potential threat to human health and the environment including potential offsite migration of pollutants and vertical migration of pollutants into existing water sources and wells.

(c) Evaluation of aquifer characteristics of the subsurface water-bearing deposits and the geologic framework of the site including potential pathways for migration of pollutants.

(d) Modification of the existing sampling program including the installation of additional monitoring wells.

2. COMPLETION DATE: March 30, 1990

TASK: COMPLETION OF SITE CHARACTERIZATION. Submit a technical report acceptable to the Executive Officer documenting completion of the necessary work to accomplish task a.1. above, and presenting findings and results.

3. COMPLETION DATE: June 30, 1989

TASK: SAMPLING PLAN, SITE SAFETY PLAN, QUALITY ASSURANCE PROJECT PLAN. Submit technical reports acceptable to the Executive Officer, with format and content being consistent with CERCLA regulations and guidance documents:

(a) Sampling Plan which includes sampling groundwater and soil, for organic and/or inorganic constituents.

(b) Site Safety Plan.

(c) Quality Assurance Project Plan.

b. 1. COMPLETION DATE: April 30, 1990

TASK: INTERIM REMEDIAL (REMOVAL) ACTIONS. Submit a technical report acceptable to the Executive Officer which contains a proposal for selecting and evaluating potential remedial (removal) actions. This report shall consider, at a minimum, soil excavation and treatment or disposal; soil vapor extraction; and groundwater extraction and treatment, and the reclamation or disposal of treated groundwater.

2. COMPLETION DATE: June 29, 1990

TASK: RECOMMENDED INTERIM REMEDIAL (REMOVAL) ACTION. Submit a technical report acceptable to the Executive Officer which contains an evaluation of interim remedial (removal) alternatives, a recommended plan for remedial (removal) action, and an implementation time schedule. This report shall evaluate remediation and/or removal of polluted soil; evaluate control systems to contain and initiate cleanup of polluted groundwater; and include any necessary permit application(s) which may be an essential element of the plan.

3. COMPLETION DATE: September 28, 1990

TASK: COMPLETION OF INTERIM REMEDIAL (REMOVAL) ACTIONS. Submit a technical report acceptable to the Executive Officer documenting completion of the necessary work identified in the technical report submitted for task b.2. above.

c. 1. COMPLETION DATE: April 21, 1991

TASK: EVALUATE INTERIM GROUNDWATER CONTAINMENT AND SOIL REMOVAL MEASURES. Submit a technical report acceptable to the Executive Officer which evaluates the effectiveness of the interim groundwater containment system. The evaluation for a system using extraction wells shall include but not be limited to an estimation of the flow capture zone, establishment of cones of depression by field measurements, and presentation of chemical analyses data. This report shall also evaluate and document the removal and/or cleanup of polluted soil, if such is an element of the remedial measures.

2. COMPLETION DATE: April 21, 1991

TASK: MODIFICATION TO INTERIM REMEDIAL (REMOVAL) ACTIONS. Specific modifications to the system and an implementation time schedule shall be proposed in the event that the groundwater containment system is demonstrated not to be effective in containing and removing onsite pollutants. This proposal shall be made in a report acceptable to the Executive Officer.

3. COMPLETION DATE: July 26, 1991

TASK: COMPLETION OF MODIFICATIONS TO INTERIM REMEDIAL (REMOVAL) ACTIONS. Submit a technical report acceptable to the Executive Officer documenting completion of the necessary work identified in the report submitted for task c.2. above.

d. COMPLETION DATE: July 26, 1991

TASK: PROPOSED FINAL REMEDIAL ACTION PLAN. Submit a technical report acceptable to the Executive Officer containing the result of the remedial investigation, an evaluation of the installed interim remedial (removal) measures, a feasibility study evaluating alternative final remedial measures, the recommended measures necessary to achieve final cleanup objectives, and the tasks and time schedule necessary to implement the recommended final remedial measures.

3. The submittal of technical reports evaluating proposed interim and final remedial measures will include a projection of the cost, effectiveness, benefits and impact on public health, welfare and environment of each alternative measure. The remedial investigation and feasibility study must be consistent with guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR Part 300); CERCLA guidance documents with reference to Remedial Investigations, Feasibility Studies and Removal

Actions; and the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California."

4. Any proposal for the discharge of extracted groundwater included in the technical report required in tasks 2.b.2., 2.c.2., and 2.d. must initially consider the feasibility of reclamation or discharge to a publicly owned treatment works (POTW), as specified in Board Resolution No. 88-160. If it can be demonstrated that reclamation or discharge to a POTW is technically and economically infeasible, a proposal for discharge to surface water shall be considered. Such proposal for discharge to surface water shall include a completed application for an NPDES permit.

5. If the dischargers are delayed, interrupted or prevented from meeting one or more of the completion dates specified in this Order, the dischargers shall promptly notify the Executive Officer. In the event of such delays, the Board may consider modification of the task completion dates established in this Order.

6. Technical reports on compliance with the Prohibitions, Specifications, and Provisions of this Order shall be submitted monthly to the Board commencing with the May 1989 report due on June 16, 1989. On a monthly basis thereafter, these reports shall consist of a brief letter report that (1) summarizes work completed since submittal of the previous report, and work projected to be completed by the time of the next report, (2) identifies any obstacles which may threaten compliance with the schedule of this Order and what actions are being taken to overcome these obstacles, and (3) includes, in the event of non-compliance with Provisions of this Order, written notification which clarifies the reasons for non-compliance and which proposes specific measures and a schedule to achieve compliance. This written notification shall identify work not completed that was projected for completion, and shall identify the impact of non-compliance on achieving compliance with the remaining requirements of this Order.

7. In addition to the monthly report required in Provision 6 the dischargers shall submit a quarterly technical report commencing with the June 1989 quarterly report due August 1, 1989. The quarterly technical report shall include, but need not be limited to, updated water table/piezometric surface contour maps, pollutant concentration contour maps for all affected water-bearing zones, geologic cross-sections describing the hydrogeologic setting of the site, and appropriately scaled and detailed base maps showing the locations of all monitoring and extraction wells, and identifying adjacent facilities and structures. The above information will be generated on a quarterly basis.

8. All hydrogeological plans, specifications, reports and documents shall be signed by or stamped with the seal of a registered geologist, engineering geologist or registered civil engineer.

9. All samples shall be analyzed by State certified laboratories or laboratories accepted by the Board using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.

10. The dischargers shall maintain in good working order, and operate as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.

11. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order shall be provided to the following agencies:

    a. Santa Clara Valley Water District
    b. Santa Clara County Health Department
    c. City of Mountain View
    d. State Department of Health Services/TSCD

    The Executive Officer shall receive two copies of all correspondence, reports and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, and may require additional copies be provided to the U.S. Environmental Protection Agency, Region IX, and to a local repository for public use.

12. The dischargers shall permit the Board or its authorized representative, in accordance with Section 13267 (c) of the California Water Code:

    a. Entry upon dischargers' premises in which any pollution sources exist, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

    b. Access to copy any records required to be kept under the terms and conditions of this Order.

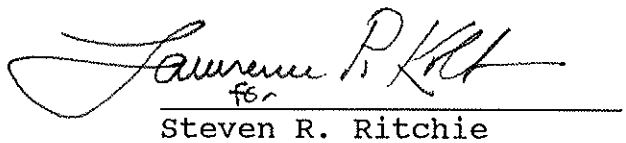
    c. Inspection of any monitoring equipment or methodology implemented in response to this Order.

13. The dischargers shall file a report on any changes in site occupancy and ownership associated with the facility described in this Order.

14. If any hazardous substance is discharged in or on any waters of the State, or discharged and deposited where it is, or probably will be discharged in or on any waters of the State, the dischargers shall report such a discharge to this Board, at (415) 464-1255 on weekdays during office hours from 8 a.m. to 5 p.m., and to the Office of Emergency Services at (800) 852-7550 during non-office hours. A written report shall be filed with the Board within five (5) working days and shall contain information relative to: the nature of the waste or pollutant, quantity involved, duration of incident, cause of spill, Spill Prevention, Control and Countermeasure Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.

15. The Board will review this Order periodically and may revise the requirements when necessary.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on May 17, 1989.



Steven R. Ritchie
Executive Officer